

REMARKS

Claims 1 to 10 are in the application.

Of these claims, claims 1-4 are withdrawn from consideration.

With respect to the objection to the drawings, submitted herewith is a proposed new Fig. 10 which shows the different material thicknesses of the base plate. The Brief Description of the Drawing has been amended accordingly.

Accordingly, it is respectfully submitted that the objection to the drawings should be withdrawn.

Reconsideration and withdrawal of the rejection of the claims under 35 U.S.C. 103(a) as being unpatentable over Riemenschneider in view of Stoner, are respectfully requested.

The reference to Riemenschneider is directed to a pallet of sheet metal with stiffening corrugations.

The reference to Stoner is directed to a transport pallet 10 which is composed of a bottom plate 11 and a support plate 12 which are spaced apart from each other by columns 13, wherein the columns

13 are formed by bending and engage in openings 20 of the plates, such that lateral entrant slots 14 are formed between the bottom plate 11 and the support plate 12 into which the gripping arms of a transporting device can engage. The two plates 11, 12, which are provided with stiffening ribs 16, 17, 19, are manufactured as pressed parts of sheet metal. The columns 13 are formed either of pieces of seamless metal pipes or they are manufactured from a strip of sheet metal which is shaped into a column and whose ends are welded together.

It is the Examiner's position that the patent to Stoner teaches the use of different thicknesses at different locations of a pallet. Applicant respectfully disagrees with this position.

Applicant submits that the reference to Stoner does not teach a support plate 12 of the pallet 10 which has portions with different material thicknesses in order to adjust the pallet portions to different stress zones to which the pallet is subjected.

Fig. 4 of the reference to Stoner merely shows that the support plate with reinforcing ribs 16, 17, 19 of the pallet 10 has a uniform material thickness which is greater than the material

thickness of the separately manufactured columns 13 for supporting the support plate 12 on the bottom plate 11 of the pallet 10.

Consequently, the combination of the references to Riemenschneider and Stoner does not disclose or suggest a pallet in which a single piece sheet metal plate forming the pallet has sections with different material thicknesses.

Reconsideration and withdrawal of the rejection of claims 7 and 10 under 35 U.S.C. 103(a) as being unpatentable over Riemenschneider in view of Stoner and further in view of Aberg, are also respectfully requested.

The reference to Aberg describes in connection with Figs. 1-5 a pallet 1 with a profiled bottom plate 3 which rests on supporting beams 4. The starting material for manufacturing the pallets 1 is a sheet metal strip 21 which is cut into sheet blanks 23 having a uniform material thickness, wherein transversely across each intersecting line 22 two spaced-apart openings 24 are cut out of the strip 21, wherein the openings 24 extend with the same length on both sides of the intersecting line 22. The blanks 23 are processed in a section rolling mill into trapezoid sections. Subsequently, the longitudinal edges of the trapezoid sections are bent inwardly in three manufacturing steps by always 90°, so that

legs are created which have a U-shaped cross-section with profiled corners 8, 7, 6. As a result of the punched-out openings 24 of the blanks 23, openings 19 are formed between the legs of the profiled bottom plate 3 during bending of the longitudinal edges of the trapezoid sections, wherein the openings 19 have upper contact surfaces 20 for the lifting arms of a fork lift or other transport vehicle which are inserted into the openings 19.

In order to prevent buckling of the inner side portion 10 of the individual legs of the pallet 1 under load, the free end 9 of the side portion 10 of the legs engages in a locking groove 11 of a lifting bar 12 mounted at the bottom side of the pallet bottom 3, wherein sheet material produced when punching out the openings 24 from the strip 21 are used for manufacturing two of the six lifting bars 12 of the blanks 23 required for each pallet.

For manufacturing the pallet 1 of the reference to Aberg with the bottom plate 3 and the individual support legs, a complicated three-stage bending process is required for bending the longitudinal edges of the blanks 23, and the individual legs must be secured by means of special profiled lifting bars 12 on the bottom side of the bottom plate 3 of the pallet 1.

In summary, applicant respectfully submits that the references to Riemenschneider and Stoner do not disclose or suggest a sheet metal plate for manufacturing a pallet of a cantilever construction by shaping a base plate and legs of the pallet of a single piece sheet metal plate by a shaping process selected from deep-drawing and/or pressing and hydroforming, wherein the sheet metal plate has sections, having different thicknesses, different material compositions, or different thickness and different material compositions, for obtaining different strength values adapted to different load zones of the base plate, as it is claimed in claim 5 of the present application. In addition, the references do not disclose the sheet metal plate with pre-shaped stiffening ribs as recited in claim 6 of the present application.

In addition, the references to Riemenschneider and Stoner do not disclose or suggest a sheet metal plate for manufacturing a pallet of a cantilever construction by shaping a base plate and legs of the pallet of a single piece sheet metal plate by a shaping process selected from deep-drawing and/or pressing and hydroforming, wherein the sheet metal plate is comprised of sections, having different thicknesses, different material compositions, or different thickness and different material compositions, for obtaining different strength values adapted to different load zones of the base plate, wherein the sections are

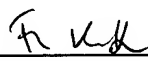
welded together to form the single piece sheet metal plate, as recited in claim 8 of the present application. Also, the references do not disclose or suggest the single piece sheet metal plate comprising pre-shaped stiffening ribs, as recited in claim 9 of the present application.

Moreover, the references to Riemenschneider, Stoner and Aberg also do not disclose or suggest a sheet metal plate for manufacturing a pallet of a cantilever construction by shaping a base plate and legs of the pallet of the single piece sheet metal plate by a shaping process, wherein the sheet metal plate is comprised of sections, and wherein one of the sections is a plate section with pre-shaped stiffening ribs and at least two if the sections are traditional flat plates welded to the plate section to form the single piece sheet metal plate, as recited in claim 10 of the present application.

Therefore, in view of the foregoing, it is submitted that this application is now in condition for allowance and such allowance is respectfully solicited.

Any additional fees or charges required at this time in connection with the application may be charged to Patent and Trademark Office Deposit Account No. 11-1835.

Respectfully submitted,




Friedrich Kueffner
Reg. No. 29,482
317 Madison Avenue
Suite 910
New York, N.Y. 10017
(212) 986-3114

Dated: April 16, 2003

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on April 16, 2003.

By: 

Friedrich Kueffner

Date: April 16, 2003